California Public Utilities Commission (CPUC) Staff Review of Load-Serving Entities' (LSEs') Compliance with the Mid-Term Reliability (MTR, D.21-06-035) and Supplemental MTR (SMTR, D.23-02-040) Decisions

Review Current as of the December 2024 IRP Compliance Filings Posted July 2025

www.cpuc.ca.gov/irp_procurement



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Executive Summary

1. Overall Compliance Achievement

- California Public Utilities Commission (CPUC) Staff review of filings indicates
 Load Serving Entities (LSEs) subject to Mid-Term Reliability (MTR) and
 Supplemental MTR (SMTR) procurement obligations have largely met their
 obligations for MTR Tranches 1 and 2 (corresponding to Years 2023 and 2024).
- Compliance achievement occurred despite interconnection challenges and a constrained generation market, in part due to regulatory flexibility via use of bridging resources.

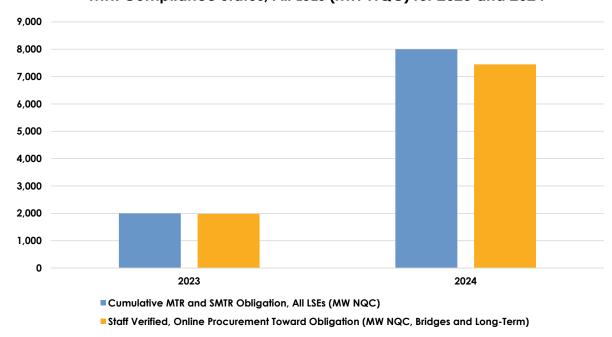
2. Compliance Achievement by Technology and Product Option

- Solar and Battery comprise the majority of resources procured to meet MTR and SMTR obligations.
- Bridge contracts are used by several LSEs in significant quantity to meet their obligations, and LSEs noted the expense of securing those contracts.

For 2023, LSEs procured and brought online 1,981 MW NQC (99% of cumulative 2,000 MW NQC obligation), and for 2024, they procured and brought online 7,449 MW NQC (about 93% of cumulative 8,000 MW NQC obligation).

Figure 1 – Procurement Status of MTR and SMTR Programs, General Obligations, All LSEs for Tranches with Past Deadlines (MW NQC)





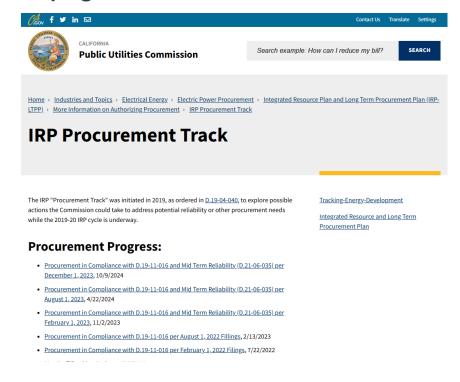
- Although some LSEs used a large number of bridge contracts to do so, LSEs as a whole largely met the high Tranche 2 requirement (2024).
- This achievement of compliance is despite supply chain and interconnection challenges described by LSEs and developers.

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Previous IRP Compliance Summaries Available

 Previous IRP Procurement Compliance Summaries are available on the IRP Procurement Track Webpage:



Available at https://www.cpuc.ca.gov/irp_procurement

Notes on this IRP Procurement Compliance Summary

- For this July 2025 release of IRP procurement summary, CPUC staff performed a holistic review of LSEs compliance filings, including:
 - Determining whether the Net Qualifying Capacity (NQC) was calculated in accordance with the MTR-specific accounting rules.
 - Confirming that the capacity was online by its associated deadline, including corroborating online data with the California Independent System Operator (CAISO).
 - Reviewing each contract to ensure that each complied with all MTR or SMTR requirements (was a valid long-term contract (10 years) or a valid bridge contract).
 - Reviewing any narrative documentation submitted as part of compliance filings to determine the context surrounding each LSE's procurement status.
- This summary does not include assessments of compliance with D.19-11-016, as the procurement required for that order is largely online.
- The MTR and SMTR programs are highly complex, and these summaries represent staff's assessment of the overall compliance status. This summary does not indicate individual compliance with LSE-specific IRP procurement obligations.
- Please reach out to <u>IRPDataRequest@cpuc.ca.gov</u> if you have questions or issues with the following summaries. Staff are available to meet with stakeholders to answer questions.

Background: D.21-06-035 (MTR) and D.23-02-040 (Supplemental MTR, or SMTR)

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D. 21-06-035: The Mid-Term Reliability (MTR) Decision

- The CPUC ordered LSEs to procure 11,500 MW NQC (Megawatts of Net Qualifying Capacity) of new resources between August 2023 and June 2026 via an order in the IRP proceeding, D.21-06-035.
- All procurement must be clean, and specifically, at least:
 - 2,500 MW must be from zero-emitting generation, generation paired with storage, or demand response resources for Diablo Canyon Replacement (DCR).
 - 1,000 MW must be from firm zero-emitting clean resources (Firm ZE).
 - An additional 1,000 MW must be from long-duration energy storage (LDES).
- Each project's MW NQC is assessed using MTR ELCC values that were established in accordance with the MTR obligation.
- For CPUC-jurisdictional LSEs serving load at the time of the order's adoption, there is no ability for LSEs to opt out of procurement obligations.

D. 23-02-040: The Supplemental MTR (SMTR) Decision

- In March 2023, the CPUC issued D.23-02-040 which ordered 4,000 MW NQC of new procurement (supplemental MTR) in 2026 and 2027, in addition to the 11,500 MQ NQC ordered in D.21-06-035 (MTR).
 - D.23-02-040 requires the procurement to be clean and otherwise follow all the rules and requirements of D. 21-06-035.
 - This Decision also recognizes the difficulties in procuring long lead-time resources (Firm ZE and LDES) by 2026, as required by D. 21-06-035, and automatically extends those deadlines to 2028.
- D.24-02-047 gave LSEs the option of extending the deadline for Long-Lead Time Resources to 2031.

Note About Net Qualifying Capacity

- All tables are reported in Net Qualifying Capacity (NQC) values, and accreditation values are specific to the MTR Decision.
 - To determine NQC values, the MTR Decision used Effective Load-Carrying Capacity values, which are calculated by determining the incremental improvement contributed to the system by incremental resources in terms of the additional load that can be served because of that improvement in reliability.
 - The ELCC values used in the MTR Decisions are described in the <u>Incremental ELCC Study for Mid-Term Reliability Procurement (2021)</u> and the update released in 2023.
 - These values differ from approaches used in the Resource Adequacy (RA) proceeding.

Procurement Order Summary and Compliance Review Schedule

Table 1. CPUC Procurement Orders (MW NQC - MTR)

CPUC Orders	Total	2021	2022	2023	2024	2025	2026	2027	2028, Option to Extend to 2031
D.21-06-035 (MTR) Applies to all CPUC- jurisdictional LSEs. No optouts allowed.	11,500 MW	n/a	n/a	2,000 MW by Aug 1	6,000 MW by June 1	1,500 MW ^{1,4} by June 1	n/a²	n/a	2,000 MW by June 1
D.23-02-040 (Supplemental MTR, or SMTR) Applies to all CPUC-jurisdictional LSEs. No optouts allowed.	4,000 MW	n/a	n/a	n/a	n/a	n/a	2,000 MW ⁴ by June 1	2,000 MW ⁴ by June 1	n/a

Table 2. CPUC Review of LSE Contracting Progress

	2023	2024	2025	2026	2027	2028
CPUC Reviews LSE Compliance Filings	February, August, December	June and December	June and December	June	December	June

⁽¹⁾ D.21-06-035 required 2,500 of the 9,000 MW required between 2023-2025 be "Diablo-Canyon Replacement".

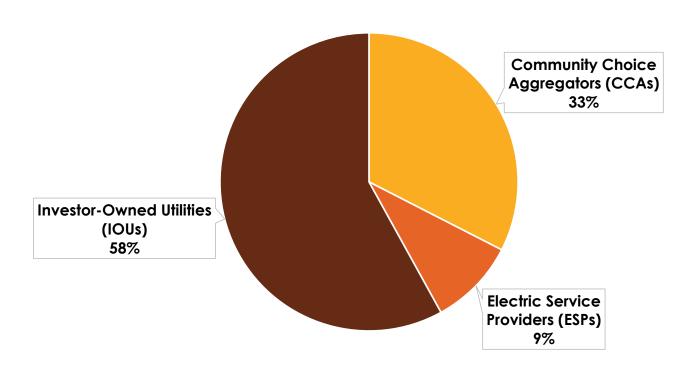
⁽²⁾ D.21-06-035 required 2,000 MW of Long-Lead Time Procurement by 2026, with an option to extend to 2028: 1,000 MW of long-duration storage and 1,000 MW of firm zero-emitting. D.23-02-040 automatically extends the procurement obligation to 2028.

⁽³⁾ In D.24-02-047 the Commission allowed for extension requests to be filed for LLT procurement. LSEs that request extensions must procure additional generic or bridge resources until their LLT resources come online

⁽⁴⁾ Under D.23-02-040, LSEs have the option to perform a "baseline swap" in which they request that a generator be removed from the MTR Baseline list and have an equal amount of capacity added to the LSE's procurement obligation. Because several LSEs took advantage of that process, the actual cumulative obligation numbers in 2025-2027 are currently about 200 MW higher than what was originally ordered in D.21-06-035 and D.23-02-040 due to baseline swaps.

Procurement Orders were distributed to LSEs based on load at the time of order adoption

Figure 2. Cumulative Total Procurement Obligations under the MTR and SMTR Orders, by LSE Type (15,500 MW NQC in Total)



Bridge Resources

- The MTR Decision allowed the use of a short-term, "bridge" contract to be used to ensure compliance in the event of a specific delayed resource.
- The SMTR Decision stated that bridge contracts cannot be longer than three years. (D.23-02-040, p.41)
- D.24-09-006 allowed bridge contracts that meet certain requirements to count towards the Diablo Canyon Replacement category of the MTR Decision.
- A Petition for Modification filed on March 21, 2025 in R.20-05-003 seeks to change the bridge resource requirements.

Enforcement of the MTR and SMTR Obligations

- The MTR Decision included a penalty for LSEs that fail to achieve their share of the capacity required between 2023 and 2025 by the June 1, 2025, milestone. (D.21-06-035, p.75)
 - The penalty was set at net cost of new entry (CONE), which was defined as the cost of new entry for battery storage resource as defined by the CPUC's Avoided Cost Calculator.
- Those penalties "may take into consideration good faith efforts to procure the required capacity." (D.21-06-035, p. 27).

Summary of the CPUC's Compliance Review Process

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Compliance Review Process

- This presentation is based on a staff review of the December 2024 LSE compliance filings.
- Staff reviewed each component of each LSE filing in an assessment that included the following:
 - Determining the LSE's obligation for each tranche.
 - Review each submitted contract (bridge contracts and longer term contracts) to ensure it complied with the requirements in the MTR and SMTR Decisions.
 - Corroborating online dates with data from the CAISO.
 - Reviewing each LSE's compliance filing to determine the context surrounding each LSE's procurement status, noting barriers the LSE has faced in bringing resources online (interconnection delays, etc.), reviewing LSEs' solicitation efforts, and generally working to gain a holistic sense of each LSE's compliance efforts.

For each of the following summaries, CPUC Staff presents the following information:

- 1. The **cumulative obligation** under the MTR and SMTR programs (the amount, in MW NQC that the LSEs were required to procure).
- 2. The **verified capacity**, in MW NQC, that staff had verified had met *all* of the requirements for a particular tranche described in the MTR and STMR Decisions at the time of staff review. These requirements include:
 - I. The contracted resource is online by the tranche's deadline; or the contract for a bridge resource meets eligibility requirements.
 - II. The LSEs have claimed the capacity from the resource toward a specific tranche.
 - III. The contract is at least 10 years in length, or is a verified bridge resource.
 - IV. The LSEs have calculated the Net Qualifying Capacity (NQC) correctly, according to the MTR and SMTR program guidelines.
- The LSEs' compliance status (Item 1 –Item 2) by group, separated by past vs. future obligations. (LSE-specific compliance is not reported herein.)
 - For years where compliance can be assessed (i.e. prior to the filing date of Dec. 2024), if a group of LSEs has not procured enough, that is described cumulatively as a deficiency.
 - For years in which the final compliance filings have not yet been assessed (i.e. dates beyond the relevant filing dates, e.g. 2025-27), any shortfall is described as the remaining capacity to be brought online and/or verified by staff.

Summary of MTR Compliance, 2023 and 2024

MTR Compliance Status of All Jurisdictional LSEs, 2023 and 2024 (MW NQC)

	Cumulative MTR Obligation	Verified Procurement (Online, Claimed Toward Tranche, and Fully Verified by Staff, both Long-Term and Bridge Capacity)	Deficient (Red) /Excess (Green)
			19 (<1% of the cumulative
2023	2,000	1,981	obligation) 551
2024	8,000	7,449	(about 7% of the cumulative obligation)

Note: This table shows the cumulative compliance of all LSEs, including the cumulative totals of any overages or deficiencies of any individual LSE. The subsequent table shows cumulative compliance based on LSE group (IOUs, ESPs, CCAs).

MTR Compliance Status by LSE Group, 2023 and 2024 (MW NQC)

	2023 Cumulative Obligation		Deficiency		Cumulative	2024 Verified Procurement	Deficiency	Deficiency or Excess as Percentage of Obligation
CCA	621	687	66	11%	2,476	2,236	-240	-10%
ESP	193	107	-86	45%	773	462	-311	-40%
IOU	1,187	1,187	0	0%	4,750	4,750	0	0%
Cumulative	2,000	1,981	-19	1%	8,000	7,449	-551	-7%

Note: Most IOU compliance for Tranche 1 and Tranche 2 was attained through new online resources, but some compliance was obtained through the use of bridge resources.

Summary of Progress Toward 2025-2027 MTR and SMTR Procurement and Specialized Procurement Categories

Reminder: These summaries do not include capacity that is contracted for, but that has not come online and met all MTR and SMTR requirements.

- This section focuses on forthcoming IRP procurement obligations.
- This section shows the verified capacity, in MW NQC, is capacity that staff had verified had met all of the requirements for a particular year described in the MTR and STMR Decisions at the time of staff review. These requirements include:
 - I. The contracted resource is online by the applicable deadline.
 - II. The LSEs have claimed the capacity from the resource toward a specific year.
 - III. The contract is at least 10 years in length, or the contract is a verified bridge resource.
 - IV. The LSEs have calculated the Net Qualifying Capacity (NQC) correctly, according to the MTR and SMTR program guidelines.
- For these years, in which the final compliance filings have not yet been assessed (i.e. IRP procurement obligations for 2025-27 and specialized categories), any shortfall is described as the remaining capacity to be brought online and/or verified by staff.

Key Differences between Expected New Resources Data and Summary of Progress Towards IRP Procurement

- Reminder: these IRP Procurement Compliance Summaries are showing progress towards compliance with IRP Procurement obligations – and not all expected new resources.
 - For this MTR Compliance Summary, staff focus on the capacity that has met **all of the requirements** outlined in the MTR and SMTR decisions (online, with a contract that meets all the requirements in the decision, etc.)
 - For upcoming summaries, staff may endeavor to break out capacity that was submitted for MTR and SMTR compliance, is under a contract that meets all the requirements, but has not yet come online. The not yet online resources are not fully represented herein.
- CPUC also releases generic "Expected New Resources" data in other presentations, in particularly on the Tracking Energy Development webpage.
 - Please note that the Tracking Energy Development data includes "Expected New MW based on LSE Contracts to date," which may include contracts expected to be submitted for MTR and SMTR compliance, but it could include other contracts, such as energy-only contracts for RPS compliance.
 - The data released as part of "Expected New Resources" data is based on LSE contracting is not "MW NQC" for MTR compliance (i.e. it is not listed in units of MTR NQC ELCC compliance).
- This information is available on the Tracking Energy Development webpage at www.cpuc.ca.gov/trackingenergy.

MTR and SMTR Compliance Status of all LSEs, Generic Procurement Categories, 2025-2027 (MW NQC)

	Cumulative MTR and SMTR Obligation	Already Online, Claimed Toward Tranche, and Fully Verified by Staff (Both Long- Term and Bridge Capacity)	Remaining Capacity to be Brought Online and/or Verified by Staff
Tranche 3			
(2025)	9,712	5,815	-3,897
Tranche 4			
(2026)	11,712	6,386	-5,326
Tranche 5			
(2027)	13,712	6,635	-7,077

Note: This cumulative obligation figure for 2025 includes 2,500 MW of Diablo Canyon Replacement Capacity. Progress toward that target, which is a subset of tranches, will be represented and summarized on a separate slide.

Note 2: As noted previously, under D.23-02-040, LSEs have the option to perform a "baseline swap" in which they request that a generator be removed from the MTR Baseline list and have an equal amount of capacity added to the LSE's procurement obligation. Because several LSEs took advantage of that process, the cumulative obligation numbers here are slightly different (i.e. higher) than those in the original MTR and SMTR orders.

MTR and SMTR Compliance Status of all LSEs and LSE Groups, 2025-2027 (MW NQC)

	2025 Cumulative Obligation	2025 Cumulative Verified Procurement	Remaining Capacity to be Brought Online or Verified	2026 Cumulative Obligation	2026 Cumulative Verified Procurement	Remaining Capacity to be Brought Online or Verified	2027 Cumulative Obligation	2027 Cumulative Verified Procurement	Remaining Capacity to be Brought Online or Verified
CCA	3,147	2,452	-695	3,818	2,577	-1,242	4,490	2,771	-1,719
ESP	923	501	-422	1,108	526	-582	1,294	526	-767
IOU	5,642	2,862	-2,779	6,785	3,283	-3,502	7,929	3,339	-4,590
Cumulative	9,712	5,815	-3,897	11,712	6,386	-5,326	13,712	6,635	-7,077

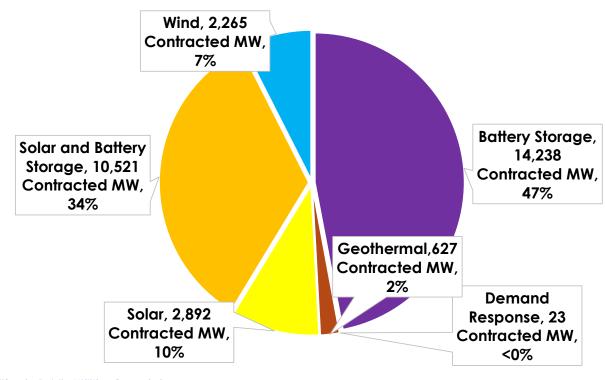
Compliance Status of all LSEs and LSE Groups, Non-Generic MTR Procurement Categories (MW NQC)

	Cumulative Diablo Canyon Replacement Obligation	Cumulative Diablo Canyon Replacement Verified Procurement	Capacity to be Brought Online	Cumulative Long- Lead Time, Long Duration Energy Storage Obligation	Energy Storage Verified	Remaining Capacity to be Brought Online or Verified	•		Remaining Capacity to be Brought Online or Verified
CCA	769	719	-51	311	12	-299	311	6	-305
ESP	246	113	-133	95	0	-95	95	0	-95
IOU	1,483	218	-1,265	594	0	-594	594	0	-594
Cumulative	2,500	1,050	-1,449	1,000	12	-988	1,000	6	-994

Trends and Observations

Much of the contracted capacity submitted for MTR and SMTR compliance was for Battery Storage, Solar, or a combination of both.

Figure 3. Resource Types Included in Contracts (10 Years or longer) Submitted for MTR and SMTR Compliance.



Note:

This figure shows the resource types included in the long-term (10 years or more) contracts submitted by all LSEs for MTR and SMTR compliance. This figure shows the resource types included in the contracts submitted by all LSEs for MTR and SMTR compliance across all years, not what has been fully verified by staff (online and deemed to be fully compliant). Additionally, the capacity shown here is what is guaranteed in each contract and does not necessarily represent MW NQC as defined in the MTR and SMTR programs. The figure does not include bridge contracts.

LSEs describe interconnection challenges, supply chain issues, and a constrained market overall.

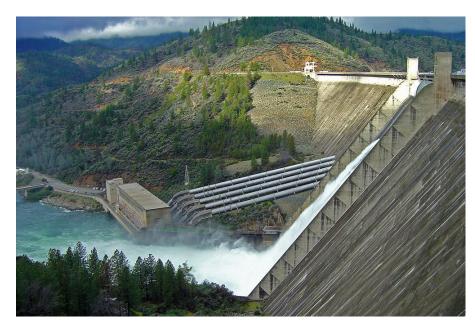
 Some LSEs noted that MTR and SMTR requirements increased demand at a time when supply was constrained, leading to increased competition for generation resources.



The Slate Solar and Storage Project (Source: Recurrent Energy)

In certain cases, short-term bridge contracts represented a large portion of an LSE's compliance efforts.

- In cases where shortfalls were anticipated, several LSEs used bridge contracts to ensure compliance.
- LSEs have described cost and affordability issues related to bridge contract procurement.
- Southern California Edison (SCE) filed a Petition to Modify D.21-06-035 and D.24-02-047 to change bridge contract requirements.



Source: Water Education Foundation



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